

What is claimed is:

1. A composition useful for lubricant applications, comprising:
  - (a) a phthalic acid or anhydride, ester, or salt thereof;
  - (b) least one of (i) an inorganic phosphorus acid or salt thereof and (ii) an aliphatic phosphorus ester other than a zinc dialkyldithiophosphate;
  - (c) a dispersant; and
  - (d) an oil of lubricating viscosity.
2. The composition of claim 1 wherein the phthalic acid or anhydride, ester, or salt thereof is terephthalic acid or an ester or salt thereof.
3. The composition of claim 2 wherein the terephthalic acid, ester, or salt is terephthalic acid.
4. The composition of claim 1 wherein the amount of the phthalic acid is about 0.0001 percent by weight to about 0.1 percent by weight of the composition.
5. The composition of claim 1 wherein both the inorganic phosphorus acid or salt of (b)(i) and the aliphatic phosphorus ester of (b)(ii) are present.
6. The composition of claim 1 wherein the inorganic phosphorus acid is phosphoric acid or phosphorous acid.
7. The composition of claim 1 wherein the aliphatic phosphorus ester is a dialkyl hydrogen phosphite.
8. The composition of claim 7 wherein the dialkyl hydrogen phosphite is di-n-butyl hydrogen phosphite.
9. The composition of claim 1 wherein the total amount of the inorganic phosphorus acid and phosphorus ester is about 0.005 percent by weight to about 2.0 percent by weight.
10. The composition of claim 1 wherein the dispersant is a succinimide dispersant.
11. The composition of claim 1 wherein the amount of the dispersant is about 1.2 to about 4.8 percent by weight.
12. The composition of claim 1 wherein (a) the phthalic acid or anhydride, ester, or salt and (b) the inorganic phosphorus acid or salt, or the aliphatic phosphorus ester, are present in a weight ratio (a):(b) of about 0.005:1 to about 0.5:1.

13. The composition of claim 1 wherein the amount of the oil of lubricating viscosity is an amount suitable to provide an oil-containing concentrate.

14. The composition of claim 1 wherein the amount of the oil of lubricating viscosity is an amount suitable to provide a fully formulated lubricant.

5 15. The composition of claim 1 further comprising a detergent.

16. The composition of claim 1 further comprising a borate ester friction modifier.

17. A method for preparing a soluble composition of (a) terephthalic acid in an oil of lubricating viscosity, comprising:

10 (A) mixing said terephthalic acid with (b) at least one of (i) an inorganic phosphorus acid or salt thereof and (ii) a phosphorus ester, to provide a concentrate; and

(B) mixing said concentrate with (d) said oil of lubricating viscosity in the presence of (c) a dispersant.

15 18. The method of claim 17 wherein the terephthalic acid is mixed with a phosphorus ester with heating until the terephthalic acid is dissolved.

19. The method of claim 18 wherein an inorganic phosphorus acid or salt thereof is subsequently added to the solution prepared thereby.

20. The method of claim 17 wherein the terephthalic acid is mixed with both (i) an inorganic phosphorus acid or salt thereof and (ii) a phosphorus ester.

21. The method of claim 17 wherein the terephthalic acid is not pre-reacted with a dispersant prior to mixing with the oil of lubricating viscosity (d).

25 22. The method of claim 20 wherein the terephthalic acid (a) is combined with (b) the inorganic phosphorus acid or salt and the phosphorus ester in a weight ratio (a):(b) of about 0.005:1 to about 0.5:1.

23. The method of claim 20 wherein the phthalic acid and the inorganic phosphorus acid or salt and the phosphorus ester are mixed in step (A) at a temperature of about 25 to about 150°C.

30 24. The method of claim 17, further comprising adding to the product thereof at least one detergent, dispersant, or friction modifier.

25. The composition prepared by the method of claim 17.

26. A method for reducing the corrosive properties of a transmission lubricant which comprises adding thereto the composition of claim 1.

27. A method for lubricating a transmission, comprising supplying thereto the composition of claim 1.

5 28. A composition comprising a homogeneous mixture of:

(a) terephthalic acid and

(b) both (i) an inorganic phosphorus acid or salt thereof and (ii) a phosphorus ester.